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AUTHOR Gertz, Ellen A.
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ABSTRACT

A practicum was designed in response to the increasing numbers of at-risk middle school students lacking appropriate academic skills as well as the motivation to learn. A small-group reading intervention program was implemented to help underachieving students increase their success rate on a mastery level. Targeted students were sixth graders, in the regular education program in a middle school (in a large southern public school district, 93% non-white), functioning approximately one year behind in reading. From this population strategy instruction was provided to six small groups (2-5 students) over a 10-week training period. During the 8-month implementation phase a total of 18 students, referred by their reading teachers for lack of progress, met once a week at their regularly scheduled reading class time. The strategy instructor taught procedures for reading as well as more general strategic processes to facilitate learning, personal responsibility, and student motivation. Pre- and posttests were administered individually, and an informal interview was conducted with all participants. A behavior rating scale was developed using reading teachers as informants. Analysis of data revealed that comprehension and memory for what was read increased for all 18 participants after cognitive strategy training. Increase in strategy use, improved class participation, oral reading, comprehension and self-evaluation were also noted. Although results suggest program effectiveness, determination of whether generalization or maintenance of appropriate behaviors will occur are difficult due to the short-term nature of the intervention. (Contains 78 references. The behavior rating scale is attached.) (Author/RS)

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ED 371 331

Enhancing Motivation and Reading Achievement Intervention Strategies for the Underachieving Middle School Student

by

Ellen A. Gertz
Cluster 45

Practicum II Report presented to the Ed. D. Program in Child and Youth Studies in Partial Fulfillment of the Requirement for the Degree of Doctor of Education

Nova Southeastern University
1994

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PRACTICUM APPROVAL SHEET

This practicum took place as described.

Verifier:

L. Keith Zeman

Area Coordinator Student Services

Title

Fort Lauderdale, Florida

Address

May 16, 1994
Date

This practicum report was submitted by Ellen A. Gertz under the direction of the advisor listed below. It was submitted to the Ed. D. Program in Child and Youth Studies and approved in partial fulfillment of the requirements for the degree of Doctor of Education at Nova Southeastern University.

Approved:

May 20, 1994
Date of Final Approval of Report

Mary Ellen Sapp, Ph.D.
Dr. Mary Ellen Sapp, Advisor

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ABSTRACT

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This practicum was designed in response to the increasing numbers of at-risk middle school students lacking appropriate academic skills as well as the motivation to learn. A small group reading intervention program was implemented to help underachieving students increase their success rate on a mastery level. Targeted students were sixth graders, in the regular education program, functioning approximately one year behind in reading. From this population strategy instruction was provided to 6 small groups (2-5 students) over a 10-week training period. During the 8-month implementation phase a total of 18 students, referred by their reading teachers for lack of progress, met once a week at their regularly scheduled reading class time.

The writer developed and implemented a strategy instruction program to teach procedures for reading as well as more general strategic processes to facilitate learning, personal responsibility, and student motivation. Pre- and posttests were administered individually and an informal interview was conducted with all participants; a behavior rating scale was developed using reading teachers as informants.

Analysis of the data revealed that comprehension and memory for what is read increased for all 18 participants after cognitive strategy training. Increase in strategy use, improved class participation, oral reading, comprehension and self-evaluation were also noted. Although results suggest program effectiveness, it is difficult to determine if generalization or maintenance of appropriate behaviors will occur due to the short-term nature of the intervention.

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CHAPTER I

INTRODUCTION

Description of Work Setting and Community

The writer works as a consultant for the psychological services department of a large southern public school district located in a rapidly growing urban metroplex. The district serves more than 200,000 students in kindergarten through grade 12. Of these students, over 25,000 receive psychological services through the Exceptional Student Education program. School psycholigists are assigned to one of three area offices in teams of approximately 25 members. Psychologists offer a comprehensive program of services to school personnel, parents and students to maximize the student's progress in all areas of learning.

Writer's Work Setting and Role

The writer is assigned to a middle school characterized by a low socioeconomic level and a diverse racial, ethnic and multilingual student population (enrollment approximately 1500). Seven elementary schools currently feed into this middle school serving grades 6, 7, and 8. Ninety-three percent of the student population is non-white. This includes 5% Hispanic and 1% Asian. English is the second language for 6% of the students. Over 800 students are at or below the federal poverty line, and 67% of the students

receive free or reduced price lunch. The school reports a 10% daily absentee rate. Of the students tested in 7th grade, 44% were below the 25th percentile in reading, and 37% were below the 25th percentile in math (Stanford Achievement Test-1992).

Based primarily on the economic status of the school community (percentage of students eligible to receive free/reduced price lunch), the school has been chosen by the district as one of 29 Performance Improvement Program (PIP) schools. PIP funds are currently provided to 7 middle and 22 elementary schools for additional school-based support services to meet student educational needs. Services include on-going teacher training (yearly workshops), the hiring of a community liason, and the establishment of a child support team. All PIP schools receive 2 days of psychological services per week.

The writer's role consists of providing standard assessment services, consultation, and of developing and implementing strategies for dealing with at-risk younsters. One day is usually set aside for assessment purposes to determine new eligibility for exceptional student education students. The second day is spent providing consultation and developing interventions within the context of a school-based child study team. On this day emphasis is on prevention and intervention rather than psychoeducational evaluation. As part of the child study team, this psychologist consults with administrators, guidance counselors, social workers, teachers and parents to develop strategies for

dealing with at-risk youngsters. Student observations, interviews, short-term counseling and academic remediation may be involved.

CHAPTER II

STUDY OF THE PROBLEM

Problem Description

Within the middle school environment low achieving students are often not provided with the specific academic skills they need to succeed on their own. While support services such as remedial reading, individualized instruction, and special education, are available to those with severe difficulties meeting strict eligibility criteria, most students with learning problems continue to receive their instruction within the regular school program. Even when remedial in-class instruction and after-school academic tutoring is available to students with mild disabilities and slow learners, the emphasis is on reteaching the curriculum content rather than on teaching children how to learn and succeed independently. This traditional approach to remediation has proved inadequate as many learning difficulties identified in elementary school persist throughout students' school careers causing them to fall further behind their classmates. These students, often considered by their teachers as having low potential for learning and as being "difficult to teach", tend to be provided with a less challenging curriculum and fewer achievement goals. Emphasis on mastery learning techniques (drill and practice), rather than teaching cognitive strategies and how to learn independently, inhibits the development of critical thinking and higher level knowledge.

The teaching of lower level skills to slow learning students, coupled with repeated failure and teacher rejection, serves to decrease learning expectations and achievement motivation. A sense of achievement is especially critical to adolescents entering middle school or junior high. Wheras young children tend to demonstrate high performance expectations, adolescents' conception of ability is altered as they compare themselves to the performance of others. When school academic environments are pereceived as failure-prone, students tend to avoid failure rather than achieve success. Those with a history of learning problems are most often vulnerable and tend to empoy failure-avoiding strategies such as nonparticipation, procrastination, and underachievment. Although lack of effort serves to limit information about one's ability by shifting the cause of failure away from one's self, these strategies as well as teacher biases, reduced expectations, and the repeated teaching of lower level skills, undermine academic self-concept and motivation resulting in the self-fulfilling prophesy of failure.

Problem Documentation

In response to the increasing numbers of low-achieving students and a high rate of "dropouts" nationwide, former President Bush had called for new strategies "to motivate students to learn and stay in school" (National Education Goals, 1991, p 25).

There is considerable evidence pointing to the ineffectiveness of traditional

practices for teaching academic content to underachieving students. Based on a national survey, 63% of all Individual Educational Plans (IEPs) focus on reading skill development (Spadofore, 1989), while at the targeted school 44% of students in the seventh grade were at or below the 25th percentile in reading according to results of a standardized achievement test (Stanford Achievement Test-1992).

The majority of students with mild disabilities and slow learners at the targeted school receive little individualized instruction. The use of "specialists," such as Exceptional Education teachers and Chapter I teachers, is only available to students meeting strict eligibility criteria. Exceptional Student Education (ESE) programs are provided for 9.75% of the students identified as mildly handicapped. Under Chapter I, 31% receive remedial reading instruction, while 38% of the students scoring at or below the 50th percentile in reading do not qualify.

From over 30 classroom observations and teacher interviews, conducted over a 2-year period, this writer found that little motivation training and strategy instruction is incorporated into the regular education curriculum. While teachers provide instruction to facilitate learning, study skills are not explicitedly taught as part of the core curriculum. With the transition to middle school it is expected that students are independent learners, and, although many do become more self-sufficient as they progress through school, others are ill-prepared for the educational demands. For some, paying attention in class is difficult. Of the

six reading teachers interviewed, all report that many of their students appear to be unmotivated and disinterested, many lack a good reading vocabulary, oral reading is halting and inexact, and students do not comprehend. Some do not take notes in class or on assigned readings, and few students use specific strategic processes such as generating questions to guide reading or using charts or graphs to represent important ideas. In order to accomodate deficiencies in skills and attitudes toward learning, teachers tend to adjust instructional demands and to minimize independent learning rather than to train students to use appropriate strategies.

Although motivational processes involved in learning are considered as important as cognitive factors, teachers are finding it difficult to get students interested in learning and putting more effort into studying.

Traditional whole class instruction, with a reliance on recitation and seat work, limits student engagement. This especially reduces the low achiever's involvement in the learning process as teachers cannot offer activities at a level where each student is expected to succeed if reasonable effort is put forth. Instructional practices do not allow for timely, constructive effort-based feedback, limiting opportunities for teachers to convey positive expectations, and attitudes toward learning.

The emphasis on grades and achievement test scores, rather than on teaching and learning, further undermines student learning and motivation. As a result of repeated failures low achieving middle school students tend to see

themselves as lacking intellectual abilities. Approximately 75% of teacher referrals to the school-based child study team involve unsuccessful students who, when in class, tend to give up easily, especially when confronted with difficult material. They demonstrate off-task behaviors, poor concentration, and lack of attention. They consider themselves ineffectual in overcoming their learning problems, verbalize reduced expectations of future achievement, and, when mastery does occur, success is often attributed to factors such as luck, teacher assistance, or an easy test rather than to personal effort. Based on student-reported low levels of personal satisfaction and increased self-criticism, the consequences of school failure negatively affect academic performance.

A recent study (Williams, 1993, May 12) found that students at the 29 Performance Improvement Program schools, including the targeted school, actually scored lower on standardized achievement tests than students from similar backgrounds at other area schools. As reported in a local newspaper article, school officials agreed that "learning [is] not stressed enough" resulting in "dismal" student performance and poor test scores (Miami Herald, p 1B).

Causative Analysis

The increasing numbers of children with academic deficiencies point to problems in the delivery of service to these children. Many teachers who lack experience are often placed with students most considered at-risk. At the targeted school for example, where 42% of incoming sixth graders were at or

below the 25th national percentile in reading (Stanford Achievement Test-1992). 60% of the full-time teachers had three years or less teaching experience.

Pulver (1993, May 13), director of the Youth Literacy Initiative at the University of North Carolina, states that "many [students] never learn to analyze what they read" (Miami Herald, p 4BR). Students entering middle school, already lacking prerequisite skills, are provided with little opportunity to develop learning strategies to enhance achievement as many teachers report that they have not had formal training in strategy instruction, nor opportunities to incorporate these techniques into the curriculum. Classroom instruction emphasizes drill and practice of reading skills rather than directly teaching comprehension strategies. This teacher-controlled approach, using workbook-type exercises often removed from actual reading or studying, tends to limit transfer of learning as students are not taught when or where to use these skills (Garner, 1984). While some programs, such as Exceptional Student Education, may use alternative methods and curriculum materials, grade level basal textbook series, selected by teachers, are used as the primary source of reading instruction for most mainstream students. Placement in reading programs based on the grade level in which students are enrolled rather than their instructional level increases the chance of school failure and student frustration.

When required to teach grade level subject matter to large, heterogeneous ability groups, few teachers have the resources to successfully provide

individual instruction, monitor performance, and offer corrective feedback. An examination of expenditures per full-time student at the targeted school indicates that only 22% of available school funds are allocated for regular education programming. Insufficient indentification and intervention for students deficient in academic skills and task-related behaviors result in further failure as achievement expectations and student efforts diminish.

Relationship of the Problem to the Literature

Faced with increasing numbers of underachieving students in the early 1980s, the National Commission on Excellence in Education (1983) called for educational reform which has prompted professionals to address motivational and cognitive issues as well as to generate research relevant to the learning process.

Psychological theory and educational research served to highlight the need for joint consideration of learning and motivation on school achievement, as well as the impact of classroom practices (American Psychological Association, 1992). Underlying educational reform is the assumption that students have a natural desire to learn. This inclination is influenced by internal factors such as one's perception of cognitive competence, expectations for success or failure, and achievement motivation (p. 15). Learning efficacy is also determined by environmental factors (e.g. instructional setting, peer influences, teacher-student relationships) that combine with the student's thoughts and feelings to enhance

or hinder positve motivation to learn (Brophy, 1981, Deci, Speigel, Ryan, Koestner, & Kauffman, 1982, DeCharms, 1984).

The concept of motivation has been explained from various theoretical perspectives. Weiner's (1984) attributional theory is based on the premise that individuals seek to explain why they succeed or fail in achievement situations in the hope that their causal attributions will help predict future outcomes. Weiner hypothesizes that achievement outcomes may be attributed to ability, effort (external causes), luck or task difficulty (external causes). Ability and task difficulty are considered to be stable factors, while effort and luck tend to vary from situation to situation. The stability factor is considered important for developing achievement expectancies whereas determining locus of control (internal/external) affects value judgments influencing achievement motivation. Test failure attributed to lack of ability (a stable internal cause) often results in lowered self-esteem, poor motivation and future expectations of failure, while failures attributed to insufficient effort (an unstable, internal cause) do not affect achievement expectancies. Failures attributed to external causes such as a difficult exam tend not to affect self-esteem or feelings about the value of the class.

Nicholls (1984) views achievement motivation in terms of task involvement in which "learning or mastery will be an end in itself," and ego-involvement where "the effort and performance of self and others" is evaluated (p 43). In both states, the underlying goal is to demonstrate high rather than low ability.

When in task-involved situations high ability is demonstrated when effort on challenging tasks results in mastery.

Additional effort is expected to lead to greater learning and higher perceived competence. When ego-involved, ability perceptions are dependent on the performance of others, as well as personal expectations of success. Ability is seen as "capacity," an internal trait inferred from social comparisons. In ego-involved states, high ability is indicated when others fail at a task and success is achieved through minimal effort.

Studies (Covington & Omelich, 1981; McCombs, 1984) suggest that if capacity is perceived as low, attempts to demonstrate ability will diminish and performance will decrease (through lack of effort and interest) in an attempt to reduce threats to self-esteem. Butkowsky and Willows (1980), in their study of good and poor readers, found that below average readers were apt to demonstrate helplessness in response to failure. They showed lack of persistence when faced with difficult material, had lower expectations for success, and attributed failure to poor ability.

Ames (1981) found that academic failure in competitive settings had more debilitating effects on self-esteem than failure in noncompetitive learning environments. Based on student-reported low levels of personal satisfaction and increased self-criticism, Ames concluded that the negative consequences of failure in social context were greater than the positive effects of success. Covington and Omelich (1981) found that repeated test-taking failures resulted

in lower levels of self-perceived ability and effort. Those with low self-concepts were found to be most vulnerable to the effects of failure. Ego-involving conditions (e.g. peer competition, tests) have been shown to adversely affect motivation to learn, while task-involvement enhances perceived competence (Deci, Betley, Kahle, Abrams, & Porac, 1981; Deci, Schwartz, Sheinman, & Ryan, 1981).

Studies by Deci, Nezlek & Sheinman (1981), and Deci, Schwartz, et al. (1981) found that children's perceived competence and motivation were directly influenced by teaching practices. Teacher expectations, differential reinforcement, and the way teachers interact with students affect achievement attitudes and beliefs (Parsons, Kaczala, & Meece, 1982). Wigfield (1982) reported that student achievement was greater in response to task-relevant instruction than when instructions were test-oriented. Competitive learning situations, as well as teacher-controlled incentives (e.g. grades) negatively affected mastery motivation while classrooms promoting autonomy and self-directed learning resulted in greater competence. Although grades are meant to provide information about learning, when used to make social comparisons to others control becomes a factor affecting student motivation (Lepper, 1983). In general, research on current educational practices points to a decrease in student intrinsic motivation (DeCharms, 1981; Harter, 1981; Deci, Speigel, Ryan, Koester,& Kaufman, 1982).

Unmotivated and unable to meet curriculum demands, low achievers do not

develop appropriate learning strategies found to improve performance (Kaufman & Hallahan, 1980). Anderson (1981) found that most low achievers did not understand the purpose or meaning of their assignment. Completing the work regardless of accuracy was the goal. Anderson suggested that lack of task involvement may be attributable in part to teachers' failure to give explicit directions and cognitive strategies. While Doyle (1983), and Rorhkemper and Bershon (1984), found that students seem more concerned about the grades they receive than understanding the purpose and content of what is to be learned. Brophy and Kher (1986), based on over 100 hours of classroom observation, reported that teachers included few statements judged to stimulate student learning.

In her study of teaching practices using basal readers, Durkin (1981) found that students were given little direct instruction in how to understand and find main ideas in what was read. Although good readers spontaneously employ appropriate strategies, Torgesen (1980) found that poor readers possess limited information processing skills, and poor recall of information. Studies by Paris and Myers (1981), and Garner and Taylor (1982) analyzing student reading patterns indicate that poor readers do not monitor their comprehension as well as good readers. They do not use basic cognitive processing strategies (e.g. rehearsal and labeling) as often as those who read well. Brown and Palincsar (1982) found that poor readers have difficulty planning and monitoring their reading activities, they are deficient in problem-solving, "lack spontaneity and

flexibility" in strategy use, and often lack motivation to learn due to prior academic failures (p. 2). Brown and Day (1983) found that, without instruction, poor readers were even unable to employ lower level cognitive skills such as summarizing or paraphrasing what was read. Forrest-Pressley and Waller (1984) maintain that, despite positive research evidence, cognitive strategy training is not emphasized in traditional reading or study skill programs. Classroom instruction emphasizes drill and practice of reading skills rather than directly teaching strategies demonstrating how to acquire those skills needed to comprehend what is read (Garner, 1984).

Developmental changes as well as the instructional environment affect performance expectations and perceptions of ability. Adolescence is characterized by a greater capacity for logical abstract thinking (Inhelder & Piaget, 1958). Cognitive changes enable the adolescent to be more self-reflective and ego-involved. This notion of ego-involvement is related to Elkind's (1967) concept of adolescent egocentrism. While developing perspective-taking, it is hypothesized that adolescents assume they are the focus of others' scrutiny causing a heightened awareness of personal successes and failures. Research by Harter (1981), using a self-reporting measure of children's orientations to achievement, found that changes in perceptions of competence and failure attributions were most pronounced at the beginning of junior high school.

Henderson and Dweck (1990) in their study of adolescent motivation found

that "the way students think about their intelligence may affect their ability and desire to master academic material" (p 319). Student perceptions were a better predictor of 7th grade achievement than actual prior performance (6th grade achievement scores). Confidence in one's ability was also predictive of levels of anxiety among the 7th grade group. The low confidence students were more vulnerable to threats to self-esteem. Students with poor self-esteem were more sensitive to failure and were likely to give up easily if a task was perceived to be difficult. These students, often identified as at-risk tend to associate failure with low ability, and demonstrate patterns of helplessness and poor motivation. These "early failures lead to a lowered sense of competence, which in turn, contributes to lowered expectations for future success, reduced achievement efforts, and further failure" (Durrant, Cunningham, & Voelker, 1990, p. 657). Walker, Stiebert & Eisert (1991) found that failure to develop adaptive motivation and achievement patterns "is predictive of a host of negative outcomes, including school academic failure and eventual dropout" (p. 301).

Academic success alone does not enhance motivation; students must be able to influence the learning process. Instructional interventions to enhance student perception of control have been effective as mastery leads to increased competence and self-efficacy (Thomas, 1980; Wang, 1983; Schunk, 1984). Students who have achieved personal causation are also better able to generalize learning strategies already mastered to new situations (Ryan, Mims, & Koestner, 1983). Research suggests that efforts to enhance student

motivation by modifying learning behavior may improve student achievement (Henderson & Dweck, 1990)

CHAPTER III

ANTICIPATED OUTCOMES AND EVALUATION INSTRUMENTS

Goals and Expectations

The goal of this practicum was to help underachieving students increase their success rate on a mastery level.

Targeted students were sixth graders, in the regular education program, functioning approximately one year behind in reading (based on standardized achievement test scores). From this population small group strategy instruction was provided to 18 students referred by their reading teachers for lack of progress.

The objective was to improve performance by teaching students to use efficient learning strategies that are appropriately challenging. Strategy instruction was intended to provide an alternative to traditional methods of remediation which teach basic skills through drill and practice at a slower instructional pace.

This writer anticipated that all participants would show positive change. By teaching low achieving students a variety of cognitive strategies with an emphasis on self-monitoring and performance evaluation, comprehension and memory for what is read were expected to improve.

Since reading is critical to overall academic functioning, as students gain greater control of the reading process and experience success, self-

efficacy or perceived competence was also anticipated to increase

As a result of enhanced self-perception of control over learning outcomes, it was expected that students would be more likely to attribute success to ability and effort (internal causes)

Expected Outcomes

The following outcomes were projected for the practicum

1 Strategy instruction would lead to improved skill in comprehension

2 Active student involvement in the reading process would strengthen observable reading and task-related behaviors including increased attention to task, more fluent and accurate oral reading, and thinking about what was being read

3 By demonstrating competence in reading student expectencies of success (self-efficacy) and ability attributions on subsequent reading tasks would also increase

Measurement of Outcomes

Improved comprehension and memory for what is read was based on pre- and posttest scores using an informal reading inventory (Classroom Reading Inventory)[1] A baseline was established prior to implementation to determine student instructional level Within-student gains were based on absolute

[1] Permission to reproduce the Inventory Records is given to those who use this test for classroom use

standards using criterion-referenced material similar to that used at the targeted school. Both qualitative and quantitative standards were employed to assess skill acquisition.

To determine student academic involvement a behavior rating scale was devised as a pre- and postmeasure of observable reading and task-related behaviors. Referring teachers were asked to rate students individually prior to and after strategy instruction.

Student performance expectations, perceived competence and ability attributions were also monitored. Before administering the informal reading inventory, the writer asked each participant the following question designed to provide a measure of expectancy of success: "How well do you think you will do on this reading test?" Initial and posttraining responses were compared to determine if expectancy shifts had occurred. Assessment of ability attributions was made after each testing session by having students evaluate their performance on the informal reading inventory. Achievement outcomes may be attributed to ability (good at reading), effort (worked hard), task difficulty (easy test) or luck (just lucky). Students were asked to rate each factor on a scale from 1-5 (1=not at all, 3=somewhat, 5=a lot) as to how it helped them answer test questions. Students who attributed success to high ability were expected to have higher expectations of success than those who attributed achievement outcomes to good luck or an easy test, factors of which they had little control.

CHAPTER IV

SOLUTION STRATEGY

Discussion and Evaluation of Possible Solutions

Although student underachievement is a growing concern, current instructional practices and curriculum decisions are often ineffective in improving student academic performance. As a result of repeated school failure these students find it increasingly difficult to maintain class involvement and motivation to learn.

Research (Wang, 1983, Schunk, 1984) indicates that before effective learning can occur students must assume responsibility, perceive themselves as competent and possess the skills necessary for self-motivation and self-control. It has been shown that intrinsic motivation can be enhanced by presenting students with realistic challenges, tasks should be matched to cognitive ability levels. By allowing children a choice of tasks, Danner and Lonky (1981) found that students made cognitively appropriate selections. Given options among learning centers, students chose tasks just beyond their measured capabilities, finding these activities moderately difficult but most interesting.

DeCharms' (1984) work on motivation focuses on the role of "personal causation" or intentionality and "agency", the effective use of learning to bring about behavior change. He found, like Danner and Lonkey (1981), that

enhancing internal control by allowing students to choose their own educational activities, and be responsible for planning and goal-setting, resulted in greater feelings of personal causation, self-confidence, and achievement motivation.

Recognizing the importance of student motivation to learning and achievement, Deci and Ryan (1985) have developed a "Cognitive Evaluation Theory" which states that intrinsic motivation is based on an "internal perceived locus of causality and enhanced perceived competence" (p 149). Locus of causality refers to the source of the regulation of behavior. When perceived as internal, self-determined behavior enhances intrinsic motivation while an external locus of causality, such as rewards or restraints, tend to decrease intrinsic motivation. Perceived competence elicited by optimally challenging tasks and informative, constructive feedback promote mastery and enhance intrinsic motivation. Deci and Ryan maintain that classroom events are perceived as having "functional significance" depending on the context. It is the functional significance, not the event that is important. The same event may be "informational" resulting in self-determined behaviors, "controlling", or "amotivational" where behaviors are neither intrinsically or extrinsically motivating.

McCombs (1984) defines continuing motivation to learn as a "dynamic, internally mediated set of metacognitive, cognitive and affective processes... that influence a student's tendency to approach... and persist in learning tasks on a continuing, self-directed basis" (p 100). This definition implies that the student

is capable of taking personal responsibility and of taking control of the learning process through the utilization of specific self-monitoring strategies and learning techniques. As acquiring academic content is dependent on such strategies, efforts to enhance student motivation to learn should include the teaching of these methods as well as promoting the concept of mastery of content as a goal. Student engagement in academic activities should encourage independent learning as well as being task, not student-oriented.

As motivation to learn is determined to a large extent by curricula and teaching practices, specific motivational strategies may be implemented to encourage content learning and skill mastery (Brophy, 1984). Efforts to correct the motivational problems of adolescents involve shifting the student from an ability to effort-based orientation by providing effort feedback, emphasis on self-monitoring tecnhiques to increase the child's perception of control and maximizing performance by adaptive instructional methods to insure success (Schunk, 1985).

For Corno and Rohrkemper (1985), intrinsic motivation is seen as a "facility for learning that sustains the desire th learn" through cognitive and metacognitive processes (p 53). In order to gain a sense of personal control, responsibility, and academic competence, students must first become self-regulated learners. Self-regulated learning (SRL) involves skills applied by the learner and is considered "the highest form of cognitive engagement" a student can use to process information (e g monitoring, planning, goal-setting) (p 60).

Research has shown that most low achieving students do not use self-regulated learning strategies in the classroom (Kaufman & Hallahan, 1980, Brophy & Rohrkemper, 1981, Snow & Lohman, 1984). If taught appropriate self-regulatory skills, it is expected that both achievement and motivation will increase (Torgesen, 1980). Arbitman-Smith and Haywood (1980) found that when slow learners were provided with successful academic experiences, motivation to learn also increased. For students using SRL, failure is more often attributed to using the wrong strategy than to lack of effort or ability (Corno, Collins & Capper, 1982).

Instructional research points to gains in student achievement through the explicit teaching of learning strategies (Raphael & Gavelek, 1984, Roehler & Duffy, 1984). Cole and Krehbiel (1984) reported academic growth as well as motivational changes in low-achieving, socially rejected students as a result of strategy training. Improvements were attributed to greater success expectancies and the belief that strategy use would enhance competence. Successful programs were found to include task-specific strategy instruction, as well as practice in self-monitoring and regulation of performance (Franks, Vye, Auble, Mezynski, Perfetto, Bransford, Stein, & Littlefield, 1982). Rather than tell the student what is expected, the teacher models the task gradually increasing the child's level of participation through guidance and feedback until these skills are internalized (Collins & Stevens, 1982). Awareness training, focusing on outcome and use, has also proved effective. Transfer of learning was found to

be greater when students understood the importance of the training as well as when and where to use specific strategies (Brown, Bransford, Ferrara, and Campione (1983); Paris, Newman, & McVey (1983). Brown and Palincsar (1982) believe that students must become strategic learners to read successfully. They must understand the purpose of reading, self-monitor performance to insure understanding, plan, evaluate and revise strategies to achieve goals. Paris, Oka, and DeBritto (1983) suggest that students need to develop an awareness and control of the reading process through the use of metacognitive strategies. It is necessary to learn to focus attention on important points and identify main ideas using self-questioning and summarization strategies. By developing metacognitve knowledge of the reading process students learn what is necessary to become competent while revising strategies to compensate for their reading limitations.

Strategy use enables the transfer of information from short-term to long-term memory where factual and procedual knowledge is stored (Brown et al., 1983). Mnemonic strategies have been found to be more effective than direct instruction in increasing memory on a variety of academic tasks. Strategies involve the recoding, relating, and retrieving of information (Levin, 1983). Pressley, Levin, and Delaney (1982) advocate using the keyword method as a mnemonic technique to enhance learning and memory. Reading disabled adolescents, using keywords combined with illustrations to learn vocabulary words, spent less time studying and outperformed students in the drill and

practice group (Mastropieri, Scruggs, & Levin, 1985). In addition to being less effective the researchers found that the direct instruction approach may mislead teachers into thinking that students have mastered the material when, in fact, they are merely repeating a teacher corrected response (p. 43). Studies have shown that information processing strategies, leading to good retention, can be enhanced through instruction by addressing cognitive processes (procedual knowledge), metacognition and motivation. By monitoring and controlling performance, efficient strategy users are motivated and involved in strategic processing (Clifford, 1984; McCombs, 1986).

Current research and techniques developed to improve comprehension, have emphasized the relationship between cognition and reading based on metacognitive theory (Flavell, Speer, Green, & August, 1981; Baker & Brown, 1984). Whereas cognition refers to the actual strategies employed by the reader, metacognition relates to the student's awareness of the processes and the ability to evaluate, monitor, and control the reading activities (Forrest-Pressley & Waller, 1984).

Focusing on metacognitive processes, Palincsar and Brown (1984) emphasize comprehension monitoring in the remediation of reading difficulties. This technique involves the reader in an ongoing process of self-monitoring of comprehension failures, and adapting new strategies when failures occur. Training in reading comprehension should include practice in strategy use, instruction in planning, monitoring and checking outcomes, as well as providing

information about the importance of the training and expected results. Question-generation was also found to promote instructional effectiveness. Generating thought provoking questions related to the text focuses attention on comprehension requiring students to become more active in the reading process (Singer & Donlan, 1982; Davey & McBride, 1986).

Traditional instruction to improve comprehension involves teacher-directed questions posed to students before reading the text. Finding that this approach limited comprehension by focusing attention on answering specific teacher-generated questions, Singer & Donlan (1982) instructed high school students to derive their own questions during the reading process. While good readers use their knowledge of basic story content and structure (e.g. setting, central characters, actions or events precipitating problems or goals, outcome) to facilitate comprehension and memory, poor readers lack knowledge of "story grammar"(p. 184). Training students to ask themselves questions about the theme, characters, goals, and other story grammar elements engages the reader in "active comprehension" helping students process and retrieve information (p. 183). Combining question-generation and story grammar training was found to increase comprehension and recall of story facts (Singer & Donlan, 1982; Nolte & Singer, 1985).

Improvement in reading comprehension has also been reported using cognitive mapping strategies (Davidson, 1982; Pearson & Spiro, 1982; Idol, 1987; Idol & Croll, 1987). Wheras skilled readers are readily able to identify

main ideas, important points, sequence events, infer and draw conclusions, there is evidence to suggest that poor readers have difficulty understanding story structure and using clues to facilitate comprehension and memory of what is read (Short & Ryan, 1984, Rahman & Bisanz, 1986). Idol (1987) taught below-average readers to construct critical thinking maps that recorded important events, main ideas, viewpoints and conclusions; all subjects improved comprehension of text and most were able to generalize skills to reading in other areas. Short and Ryan (1984), Nolte and Singer (1985), as well as Idol (1987), also used mapping strategies to improve narrative story reading. By recording the setting (characters, theme, place), problem, goal, action and outcome, poor readers were better able to remember and understand what they read.

Mapping strategies enable poor readers to graphically conceptualize and organize narrative content (Alvermann, 1981). Comprehension gains may be attributable, in part, to the novelty of the procedure and appeal to students with spatial and visual perceptual learning styles. Visual representation allows important points and relationship among facts and ideas to be presented hierarchically during or after the reading activity to improve comprehension and memory. Mapping helps organize information to be learned and allows the reader to better able predict and draw conclusions (Berkowitz, 1986).

As a student's prior knowledge base is another factor considered important to the reading process (Wilson & Anderson, 1986), mapping has also been

found to "activate" this information by establishing a relationship between the new reading material and what is already known (schemata). According to schema theory, comprehension is determined by the interrelation of a person's prior knowledge and current reading material or how well the student interacts with the text (Spiro, 1980). Hansen and Pearson (1983) used reading discussion groups to activate prior knowledge, while Dewitz, Carr, and Patberg (1987) were successful using a cloze procedure. Students were taught to fill in the blanks on questions requiring use of prior knowledge as well as information obtained from text. In both studies, strategy training appeared to be more effective with below average students; comprehension gains were pronounced for poor readers. Activation of prior knowledge was less effective with good readers who presumably are better able to recall information relevant to a topic.

Baumann (1984) and Berkowitz (1986) used cognitive mapping strategies to teach summarization to sixth-graders. Training, using graphic summarizing strategies, helped writing and organizational skills as well as understanding for what was read. Improved recall and comprehension through summarization instruction has also been reported by Bean and Steenwyk (1984) as well as Rinehart, Stahl, and Erickson (1986). Research evidence indicates that it is more effective than traditional remedial techniques (Taylor & Beach, 1982; Berkowitz, 1986; Armbruster, Anderson, & Ostertag, 1987).

Palincscar and Brown (1984) instructed seventh grade students, who were experiencing reading comprehension problems, to generate summaries of what

they read. Training involved reciprocal teaching through interactive dialogue and corrective feedback. Summarization instruction focused on identifying and paraphrasing the main idea, classifying information, interpreting what was read, and predicting what would happen next. Corrective feedback included guiding the student in looking back to the passage for the correct answers to comprehension questions. Employing the "lookback" strategy prior to strategy training rather than after proved more effective as it was found that poor readers do not readily refer back to the text to answer questions. (Garner, Hare, Alexander, Haynes & Winograd, 1984).

Whereas traditional reading instruction provides practice using isolated exercises, strategy training occurs within the context of actual reading to enhance comprehension and memory of the text. Reading for meaning or understanding can be enhanced using comprehension monitoring strategies, while reading for remembering can be improved by learning to identify important ideas, developing study strategies and time management (Baker & Brown, 1984). In measuring reading skills, Forrest-Pressley and Waller (1984) found that efficient strategy use was the best predictor of reading ability for sixth graders. Poor readers at this level had difficulty selecting and implementing appropriate task strategies. Reading efficiency was determined by dividing a reading comprehension score by the time needed to complete the task. Comprehension is measured "by the degree to which a reader can use the information which has been read" (e.g. standardized test) (p.36). Good readers

not only have the ability to comprehend what has been read, but also retain and recall information for use at a later time. They are also able to determine how effective their performance will be and explain processes used. Efficient readers are flexible and adapt strategies to particular situations.

Description and Justification for Solution Selected

This writer developed and implemented a strategy instruction program to teach procedures for reading (e.g. self-questioning, story grammar, summarization) as well as more general strategic processes (e.g. self-monitoring, planning) to facilitate learning, personal responsibility, and student motivation.

Targeted students were sixth graders, in the regular education program, functioning approximately one year behind in reading (based on standardized achievement test scores). From this population small group strategy instruction (2-5) was provided to a total of 18 students referred by their reading teachers for lack of progress. Group composition was determined solely by class schedule. During the 8-month implementation phase of this practicum six 10-week training sessions were conducted.

Although good readers appear to be strategic learners in control of the reading process, research evidence indicates that poor readers do not monitor their comprehension as well. Many are unaware of their reading limitations and lack the skills necessary to read successfully. Strategy instruction has proved

to be especially effective in increasing the comprehension and recall of poor readers. Since reading is basic to all school learning these success experiences should generalize to content areas learning. As repeated school failure relates to low achievement motivation, research suggests that the process can be reversed as students are taught to learn and succeed on their own. Training underachievers to actively utilize new learning strategies, not associated with prior failures, was expected to enhance student perception of control, promote mastery, and increase competence.

Student difficulties were diagnosed, using the Classroom Reading Inventory as a pretest. Strategy instruction was based on student error patterns and task analysis. After establishing other baseline conditions (observable reading and task-related behaviors, student performance expectations, ability attributions), this writer addressed motivation and self-concept issues such as realizing potential, wanting to learn, doing the work and the importance of reading. Individual student and program goals as well as steps toward achievement were discussed.

Strategies were taught within the context of high interest fictional literature at the students' instructional level. This writer modeled and explained the purpose and importance of the various strategies prior to student practice. Constructive feedback, prompting, and reinforcement were provided and gradually reduced as the students became more proficient in strategy use. Student progress was monitored and instruction adjusted accordingly.

Training included elements of several proven strategies: story grammar, cognitive mapping, summarization, activating prior knowledge, question generation and question-answering. Although instruction varied between groups, depending on existing reading skills, student interest, and task performance, all students learned to execute at least two strategies during the training period.

Each session students were provided with parts of a story to be read. Strategy 1: Pre- and postreading group discussions were held focusing on background information, vocabulary, and personal experiences relating to situations presented in the story (activating prior knowledge). All students were given a predetermined amount of time for silent reading (planning), then they were asked to follow while listening to others read. Strategy 2: During this time the group was required to generate several questions they would like answered as the story progresses (question generation). At the end of each session all students were required to answer 5 multiple choice questions pertaining to basic story elements (central characters, goals, obstacles, outcomes). Strategy 3: Students were taught to refer to the story for answers (question-answering/lookback). All students were asked to monitor achievement by keeping a graph of their performance on quizzes (self-monitoring). Strategy 4: Students were taught to construct paragraph, chapter, and eventually book summaries. While reading, students were trained to focus attention on main ideas, identify supporting information, and learn to delete

unimportant and irrelevant data (Rinehart, Stahl, & Erickson, 1986). Strategy 5. Story grammar was taught using question-answering techniques as well as mapping strategies. As they read the story students were trained to ask themselves basic questions pertaining to the main character (who?), setting (where and when?), problem, obstacles, goal, and outcome (what?). Students were trained to underline their answers in addition to constructing maps to record the information.

Report of Action Taken

This writer was available as a consultant on an on-going basis to implement instructional interventions designed to teach low achieving students specific cognitive strategies for reading, as well as to teach techniques to facilitate learning, personal responsibility, and motivation. Materials and procedures to be implemented were shared with the reading teachers whose pupils were participating in the program.

Targeted students were sixth graders, functioning approximately one year behind in reading (based on standardized achievement test scores), referred by their reading teachers for lack of progress. Strategy instruction was provided to small groups (2-5 students) over a 10-week training period. During the 8-month implementation phase of this practicum a total of 6 groups met once a week at their regularly scheduled reading class time. Format of training sessions and procedures was the same for each group.

During the first week of implementation the Classroom Reading Inventory (Silvaroli, 1990) was administered on an individual basis in addition to an informal interview designed to assess student performance expectations, ability attributions, and knowledge of reading strategies. To measure expectancy of success, each student was asked, prior to testing, how well he or she thought they would do on the reading test. Posttest assessment of ability attributions was made by having students evaluate their performance on the informal reading inventory. Achievement outcomes could be attributed to ability (good at reading), effort (worked hard), task difficulty (easy test) or luck (just lucky). Students were asked to rate each factor on a scale from 1-5 (1=not at all, 3=somewhat, 5=a lot) as to how it helped them answer test questions. Additional interview items, adapted from Forrest-Pressley and Waller (1984), to assess strategy use include asking the students to explain what processes they use to help them understand and remember what they read. Referring teachers were also requested to complete a behavior rating scale for each participant as a baseline of observable reading and task-related behaviors.

During Week 2 students were given reading folders, pencils, notebooks, and graph paper. Motivation and self-concept issues such as realizing potential, wanting to learn, doing the work, and the importance of reading were discussed. Individual student and program goals were established, as well as steps toward achievement. It was made clear that the intent was to improve reading skills, which in turn would enhance performance in the content areas as

well. The purpose of strategy instruction, expected outcome and use were emphasized. Participants were told that becoming a successful student often depends on using the right learning strategy rather than just being smart or trying hard. As an introduction to strategy use this writer referred to the analogy developed by Palincsar (1986) comparing strategy instruction to a football game. Strategic processes were depicted as game plans. Team players, realizing their own strengths and weaknesses, must chose the appropriate strategy for each play. Players must continually evaluate their performance and select new strategies when necessary. Similarily, students need to know which strategies are effective to meet various learning demands, and be able to alter their approach if they are not achieving learning goals.

The literature-based reading program began in Week 3. Strategies for comprehension and recall were taught within the context of high interest fictional literature, incorporated into the school curriculum, and at the students' instructional level. Strategy instruction, conducted over a 7-8 week period, emphasized reciprocal teaching methods designed to actively engage students in the training (Palincsar & Brown, 1984).

In the initial phase of instruction this writer was primarily responsible for guiding the discussion by modeling and explaining the purpose and importance of the various strategies prior to student practice. With each session this writer tried to transfer more responsibility to the students. Constructive feedback, prompting, and reinforcement were gradually reduced as the students became

more proficient in strategy use

Each session a new "teacher" was appointed while students were provided with chapters of the book to be read. A predetermined amount of time was allocated for silent reading (approximately 10 minutes), then students were asked to follow while listening to others read aloud. Teachers were expected to ask questions about what was read, lead group discussions, focus on strategy use, and provide feedback to others.

Both performance ("You've got the right answer") and attributional feedback ("You're good at this") were offered, as well as effort-based reinforcement ("You're working hard"). Each week students were reminded of the importance of reading strategies in helping to understand and remember what they read. At the end of each session students were required to answer 5 multiple choice questions pertaining to basic story elements (central characters, goals, obstacles, outcomes). Confirmation of within-student progress, opportunities for self-monitoring and added pupil responsibility were provided through the weekly graphing of quizz grades.

Training included elements of several proven reading strategies: story grammar, cognitive mapping, summarization, activating prior knowledge, question generation and question answering. Story grammar (basic story content and structure) was taught using story maps (Idol, 1987) and by training students to ask themselves and then answer a standard pattern of "wh" questions focusing on the structure of the story (Short & Ryan, 1984). This

writer first modeled use of the story map strategy, explaining its purpose and various elements as students practiced making their own maps. While reading passages aloud, students filled in map components as information was identified in the story. Students were encouraged to recheck answers and add details as the narrative progressed. Maps were checked for accuracy and corrections made until students could successfully complete maps with little or no teacher assistance. Other groups were taught to articulate basic "wh" questions pertaining to the main character (who?), setting (where and when?), problem, obstacles, goal, and outcome (what?). Students were instructed to label answers in the margin and underline phrases in the passage that helped answer each question. After underlining students were asked to repeat the questions and answer orally. If correct the student was praised. If incorrect this writer highlighted, using a different colored marker, the appropriate information on the student's copy. During training, students were often reminded to look for answers to the key "wh" questions while reading. The correct information was reinforced by both oral response and underlining. Gradually prompts were discontinued as students began to use the strategy independently.

Other groups were taught how to generate their own questions as they read. After the students listened to each other read aloud, this writer modeled the self-questioning strategy by asking the group questions about the chapter. Students were then asked to generate their own questions they would like

answered as the story developed Feedback about the appropriateness of each question was provided by this writer as well as from other students

Groups also learned where to find answers to questions using the "lookback" strategy (Garner et al , 1984) and question-answer relationships (QARs) (Raphael, 1986) They were taught to analyze questions to see if answers could be found "right there" in the story, or if they needed to "think and search" in more than one sentence or paragraph for the information Students were trained to look back by skimming through the chapters Answers not found in the text were characterized as "on my own" requiring the student use information "in my head" rather than "in the book" Question-answer relationships were taught by having students underline explicit statements in the text that were then asked as questions By looking back and labeling the marked segments students could see where the information was located to give them the answer Modeling was gradually faded as students began constructing their own questions

Rather than generate questions about what was read, other groups were trained to summarize the content and focus attention on main ideas by underlining important sentences and crossing out unimportant and irrelevant data (Rinehart et al , 1986) At the beginning of each session students were called upon to review the important information and give a oral summary of what had happened in the story so far After reading each chapter, students were asked to identify and express, in their own words, the main idea This

writer modeled summarization strategies by "talking through" examples and providing constructive feedback. Following group training and oral rehearsal students practiced writing their own brief chapter and book summaries.

Group dialogue was used as a mechanism to activate prior knowledge. Both pre and post reading group discussions were held focusing on background information, vocabulary and personal experiences relating to situations presented in the story. First this writer explained the rationale for establishing a relationship between new reading material and what is already known. Students were told, at each prereading session, that activating prior knowledge would help them understand and remember what they read. Discussion focused on establishing common links between personal experience and key vocabulary terms and concepts. After reading each chapter the students were guided in identifying the main ideas and asked to relate ideas in the story to previous experiences as well as make predictions using their own knowledge base. As with all strategy instruction modeling, corrective feedback, and guided practice were gradually faded as groups became more proficient and students took turns leading the discussions.

CHAPTER V

RESULTS, DISCUSSION AND RECOMMENDATION

Results

Whereas good readers appear to be strategic learners in control of the learning process, poor readers do not monitor their comprehension as well. Many do not recognize their errors or are unaware of ways to correct reading deficiencies. By teaching low achieving students cognitive strategies with an emphasis on self-monitoring and performance evaluation comprehension and memory for what is read are expected to improve.

Outcome 1. Strategy instruction would lead to improved skill in comprehension.

This outcome was met.

Increased understanding and recall was based on a comparison of pre- and posttraining test scores using the Classroom Reading Inventory (Silvaroli, 1990). Baseline measures, obtained from this informal assessment of reading skills, confirmed that all participants were functioning at least one year behind current grade placement. Estimated pretest instructional reading levels (level at which the student obtains at least 95% accuracy in word recognition and 75% in passage comprehension on the CRI) for the 18 participants are as follows: 5 students scored on a second to third grade level, 7 were functioning on a fourth to fifth grade level, and 6 were estimated to be on a fifth grade instructional

level. Both literal (factual) and inferential comprehension errors were prevalent. For some, poor word recognition interfered with passage understanding, while other students could be characterized as "word callers" reading without associating meaning. Regardless of preexisting reading skills and strategy instruction all participants showed a gain of at least one reading grade level. Sixteen advanced one level while 2 of the students showed a two-year improvement.

Outcome 2. Active student involvement in the reading process would strengthen observable reading and task-related behaviors including increased attention to task, more fluent and accurate oral reading, and thinking about what was being read.

This outcome was met for 6 out of 18 of the students.

Using the referring reading teachers as informants, overall reading and task-related student behaviors observed in the classroom appeared to improve only slightly over time. However, an item analysis of pre- and posttraining scores on the behavior rating scale indicate gains in oral reading ability, participation in class discussion, understanding what is read, and evaluates work accurately. Six out of 18 of the participants demonstrated improved class participation, oral reading, comprehension and self-evaluation.

Outcome 3. By demonstrating competence in reading student expectancies of success (self-efficacy) and ability attributions on subsequent reading tasks would also increase.

This outcome was not met.

Although initial and posttraining student responses to the question "How well do you think you will do on this reading test?" suggest little change in performance expectations, the positive answers given after strategy instruction more accurately reflected actual achievement with success attributed to ability (good at reading) and effort (worked hard). When students were initially asked to evaluate their performance on the informal reading test achievement outcomes were more often attributed to task difficulty (easy test) and other factors of which they had little control (luck) or were unaware of (don't know).

Prior to training, lack of familiarity and use of reading strategies was further evidenced when participants were asked to explain what processes they used to help them understand and remember what they read. A representative sampling of student responses are as follows: stop and think, try and remember, write it down, read it over, explain it to myself, read slow, keep it in my mind, look it up in the dictionary, sit for a while, try to sound it out, and look for the answer. After strategy instruction students not only demonstrated an increase in strategy use but were able to "talk through" techniques used to improve comprehension and memory.

Discussion

The objective of this practicum was to enhance the performance of underachieving students by teaching them to use various reading strategies

shown to be effective in improving comprehension and memory for what is read.

Although gains in reading comprehension suggest training effectiveness, it is difficult to attribute results solely to strategy instruction due to the limited duration and restricted conditions of training. Instructional methods utilized on a regular basis by the sixth grade reading and content area teachers, as well as incidental learning and maturation are assumed to also contribute to reading outcomes. On the other hand, lack of strategy instruction in the classroom and limited opportunity for students to use the techniques they learned during training sessions are assumed to have negatively influenced results.

Lack of continuity and student inability to transfer learning to the classroom were reflected in the minimal improvement in overall reading and task-related behaviors reported by the classroom teachers on the behavior rating scales. Gains in specific areas such as oral reading, comprehension, and self-evaluation point to differentiation in strategy efficacy.

Students taught story grammar using mapping strategies appeared to have better recall and understanding for what they read. Although oral response and underlining helped students focus on the structure of the story, the novelty of story maps was appealing and the visual display helped to organize the narrative content.

Improved memory and comprehension were also found in students who learned to use the "lookback" strategy and question-answer relationships

(QARs). Generating thought provoking questions related to the story helped focus attention on comprehension and kept the students active in the reading process. Self-questioning also encouraged students to think on their own and not rely on teacher-generated information. Since most students did not readily refer back in the story, instruction in using the "lookback" strategy helped them find the correct answers, and reinforced the fact that no one can remember everything they read. In general, combining question-generation and story grammar training was found to best increase comprehension and recall of story facts.

Less effective were summarization instruction and activating prior knowledge. Although training students to summarize by underlining important sentences and crossing out unimportant and irrelevant information helped focus attention on significant points, oral summaries continued to contain trivial and nonessential detail. Written summaries also proved to be troublesome for these remedial students lacking prerequisite expressive writing skills. Students had difficulty developing and organizing main ideas; poor grammar, word usage, and vocabulary inhibited fluency and clarity.

Although group dialogue was intended to activate prior knowledge, poor verbalization skills, limited range of information and educational background made it difficult for students to make predictions using their own knowledge base as well as relate personal experiences to ideas and concepts in the story.

Teacher reported gains in oral reading, class participation, and self-

evaluation are assumed to directly relate to strategy and attributional training. Repeated practice in reading aloud with corrective feedback during training sessions led to more fluid and precise reading patterns. Rather than impede comprehension, error correction facilitated word recognition and understanding of text. It appeared that students felt more comfortable reading in small groups with others of similiar ability. Praise from peer "teachers", and attributional feedback focusing on ability ("You're good at this") and effort ("You're working hard") seemed to encourage self-confidence and enhance performance. Instead of anticipating criticism, students became active participants and readily engaged in class discussions. Emphasizing the relationship between effort, strategy use and successful performance, while gradually relinquishing control to the students, served to increase their belief that they could affect their learning by taking charge of the reading process. Confirmation of within-student progress through frequent and direct assessment of reading comprehension, as well as teaching procedures for self-monitoring helped students evaluate and revise strategies. Placing responsibility on the student to monitor and control his/her performance seemed to motivate and encourage active involvement in the learning process.

In conclusion, focusing on both metacognitive processes and task-specific reading strategies appears to enhance student self-efficacy and performance. By linking actual learning strategies with positive beliefs students seem to develop a greater sense of control over achievement outcomes which serves to

facilitate the learning process.

Recommendations

As cognitive and metacognitive aspects of learning appear to affect achievement outcomes it is recommended that strategic procedures be taught as part of the academic curriculum. Specifically, reading instruction should include practice in strategy use, instruction in planning, monitoring and checking performance, as well as information about the importance of the training and expected results. These interventions have shown to be especially effective with low achievers, showing patterns of helplessness and poor motivation, who have not developed appropriate learning strategies on their own. As they gain greater control over the learning process and experience success self-efficacy also tends to increase.

Dissemination

As strategy instruction can easily be implemented in the classroom, results and recommendations will be shared with school psychologists, regular and special education teachers and behavior specialists, as well as with middle school child study team members, teachers and guidance counselors. Staff inservice training will be made available if implemented is considered.

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APPENDIX A

BEHAVIOR RATING SCALE

Student_____

Behavior Rating Scale

Please rate the student's behavior on a scale from 1-5

1=very unsatisfactory
3=average
5=superior

Reading Behaviors

_____1 oral reading ability
_____2 participates in class discussion
_____3 understands what he/she reads
_____4 attends to others during oral reading
_____5 keeps appropriate place in book
_____6 follows written directions

Task-Related Behaviors

_____1 follows oral directions
_____2 stays on task
_____3 work is accurate
_____4 completes assignments
_____5 evaluates work accurately
_____6 is prepared for class

Comments _____

_____

_____

_____
Teacher